

## WHAT IS CLAIMED IS:

1. In an apparatus for treating cytological or histological specimens, said apparatus having multiple processing stations arranged in a housing and having a transport device for delivering said specimens, or object carriers carrying said specimens,  
5 into and out of said processing stations, the improvement comprising:  
a modular treatment station having permanently definable functions; and  
a region, coordinated with said processing stations, for receiving said modular treatment station.
- 10 2. The improvement as defined in Claim 1, wherein said region comprises at least two combined reception and connection regions each for receiving a corresponding modular treatment station.
- 15 3. The improvement as defined in Claim 2, wherein said modular treatment station comprises a supply system.
4. The improvement as defined in Claim 3, wherein said modular treatment station further comprises a disposal system.
- 20 5. The improvement as defined in Claim 3, wherein said combined reception and connection regions comprise a bar for reception and insertion of said modular treatment station, and a docking point for connection of said supply system.

- 5
6. The improvement as defined in Claim 4, wherein said combined reception and connection regions comprise a bar for reception and insertion of said modular treatment-station, and a docking point for connection of said supply system and said disposal system.
7. The improvement as defined in Claim 5, wherein said modular treatment station has plug-like connector stems and electrical contacts that correspond to corresponding openings and contacts of said docking point.
- 10 8. The improvement as defined in Claim 7, wherein a connection that is electrically conductive is created between said modular treatment station and said apparatus when said modular treatment station is in a docked state.
- 15 9. The improvement as defined in Claim 7, wherein a connection that is thermally conductive is created between said modular treatment station and said apparatus when said modular treatment station is in a docked state.
- 20 10. The improvement as defined in Claim 7, wherein a connection that carries a flow medium is created between said modular treatment station and said apparatus when said modular treatment station is in a docked state.
11. The improvement as defined in Claim 1, wherein said region for receiving said modular treatment station is configured alongside said multiple processing stations.
- 25 12. The improvement as defined in Claim 1, wherein said region for receiving said modular treatment station is configured at least slightly below said multiple processing stations.

13. The improvement as defined in Claim 1, wherein an access opening is provided in said housing for insertion and removal of said modular treatment station.
14. The improvement as defined in Claim 13, further comprising a cover for closing  
5 said access opening.
15. The improvement as defined in Claim 13, wherein said housing includes a back wall and said access opening is provided through said back wall.
- 10 16. The improvement as defined in Claim 15, wherein said access opening is provided through a lateral portion of said back wall.
17. The improvement as defined in Claim 1, wherein said modular treatment station comprises a container for receiving liquid used for treatment of said specimens.  
15
18. The improvement as defined in Claim 17, wherein said modular treatment station comprises a heating station.
19. The improvement as defined in Claim 17, wherein said modular treatment station  
20 comprises a rinsing device.
20. The improvement as defined in Claim 17, wherein said modular treatment station comprises a turbulence-inducing device for said liquid used for treatment.
- 25 21. The improvement as defined in Claim 17, wherein said modular treatment station comprises a fan.
22. The improvement as defined in Claim 17, wherein said modular treatment station

comprises an extraction system for extracting vapors.

23. The improvement as defined in Claim 22, wherein said extraction system includes an extraction chamber.

5

24. The improvement as defined in Claim 23, wherein said apparatus has a central extraction system for extracting vapors, and said extraction chamber of said modular treatment station is in flow communication with said central extraction system.

10

25. The improvement as defined in Claim 17, wherein said modular treatment station comprises a control system for various functional units.

26. The improvement as defined in Claim 25, wherein said control system is a closed-loop control system.

15

27. The improvement as defined in Claim 17, wherein said chamber also receives said object carriers.

28. The improvement as defined in Claim 27, wherein said chamber includes holding means to receive and secure said object carriers.

20

29. The improvement as defined in Claim 1, wherein said transport device serves to deliver said specimens, or said object carriers carrying said specimens, into said modular treatment stations.

25

30. The improvement as defined in Claim 29, wherein said transport device is embodied as a robot arm.

31. The improvement as defined in Claim 30, wherein said robot arm has two partial arms.

5 32. The improvement as defined in Claim 30, wherein said robot arm is rotatable about a vertical shaft.

33. The improvement as defined in Claim 30, wherein said robot arm is adjustable in height.

10